This section presents the reports that would typically be submitted to MDNR to document each of the MRBCA activities. In the following discussion, the term "narrative report" refers to conventional, written reports and can include text, figures, tables, and attachments. Please note that the narrative content descriptions below might not be inclusive of all elements needed to fully explain events and actions at a site. Therefore, the person preparing the report may include in the narrative sections any additional information they believe necessary.

Note that submitting information to MDNR more than once is not necessary, except as part of the Tier 1, 2, and 3 Risk Assessment Reports, as more fully discussed below. For instance, information submitted with the Tank Closure Report need not be resubmitted as part of a Site Characterization Report and information from the Initial Hazard Abatement Measures Report need not be submitted as part of the Corrective Action Plan. Many other examples exist; however, the point is that providing the same information to MDNR on more than one occasion, except as part of the Tier 1, 2, or 3 Risk Assessment Reports, is not necessary.

12.1 TANK CLOSURE

12.1.1 Closure Notice

- **Schedule**: Closure schedule as requested by the owner/operator; closure notice form must be submitted to MDNR no less than 30 days prior to closure
- **Intent of report**: To notify MDNR of tank closure
- **Contents**: Form MO 780-2121 (01-12) available on-line at http://dnr.mo.gov/env/hwp/tanks/ustclosure.htm

12.1.2 Closure Report

- **Schedule**: Within 60 days of closure
- **Intent of report**: To document tank closure.
- **Contents**: Form MO 780-2120 (10-12) available on-line at http://dnr.mo.gov/env/hwp/tanks/ustclosure.htm

12.2 SITE DISCOVERY

12.2.1 Release/Suspected Release Report

- **Schedule**: As soon as practical but no later than 24 hours of discovery
- **Intent of report**: The Release/Suspected Release report is intended to provide MDNR with sufficient information to identify the time, place, and source of the release and hazards and contamination resulting from the release.
- **Contents to include, but not necessarily be limited to, the following**

(unless previously submitted):

- Identification of site (name, location, owner, contact information, ST and R numbers, if applicable),
- Description of release and identification of source of release,
- Steps taken to confirm release and address immediate hazards,
- Site map with source of release and known extent of resulting impact identified,
- Laboratory analytical data sheets, Quality Assurance/Quality Control (QA/QC) data, and chain of custody forms (must be submitted as received from the laboratory),
- Documentation of release reporting,
- Explanation of need for further action, and
- Further actions planned and schedule for such actions.

12.2.2 Initial Hazard Abatement Measures Report

- **Schedule**: 20 days from release confirmation, subsequent reports as stipulated by MDNR
- **Intent of report**: The Initial Hazard Abatement Measures report shall document the release and the responsible party's response to the release.
- **Contents to include, but not necessarily be limited to, the following (unless previously submitted)**:
  - Site identification (location, site name, owner, contact information, ST and/or R numbers (if applicable),
  - Identification and description of tank systems and their status (i.e., closed, inactive, active),
  - An explanation of the release and actions taken to identify and abate hazards associated with the release,
  - If applicable, laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - An explanation of the need for future actions (investigative, monitoring, remedial, etc.),
  - Site map showing general location,
  - Site map showing specific site features (e.g., tanks, dispensers, piping, utilities, release points, etc.),
  - A discussion of planned actions and a schedule for such actions, and
  - Tables, figures, and other maps shall be included as warranted.

12.2.3 Site Check Report

- **Schedule**: to be performed within 7 days from suspected release, report within 60 days of completion of site check
- **Intent of report:** The Site Check Report is intended to document the responsible party's efforts to determine whether a release has occurred and, if so, the actions taken to define the general extent of contamination, in all media of concern, resulting from the release.

- **Contents to include, but not necessarily be limited to, the following**:
  -
  - An explanation of the reason for, and the scope and purpose of, the Site Check,
  - A narrative chronology of events resulting in the Site Check,
  - A map showing general site location and specific sampling locations,
  - The rationale for sample locations chosen,
  - An explanation of the field and laboratory methods and procedures utilized,
  - As applicable, monitoring well construction diagrams as per the examples at 5-4(a) and (b) of Section 5.0 of this document,
  - Boring logs for all borings (a log must be submitted regardless of whether the boring was converted to a monitoring well) as per the examples at 5-3(a) and (b) of Section 5.0,
  - As appropriate, maps showing isoconcentration lines for benzene, TPH-GRO or DRO, MTBE, and any other COCs detected at high concentrations and/or over a broad area,
  - Laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - An analysis of the findings of the investigation,
  - A discussion of response or remedial actions taken, if applicable,
  - A discussion of the need for subsequent action (investigative, monitoring, remedial, etc.) and identification of planned action,
  - A schedule for future actions, and
  - Figures, tables, other maps, etc. shall be included as warranted

12.2.4 System Test Report

- **Schedule**: to be performed within 7 days from suspected release, report within 20 days of the test
- **Intent of report**: The System Test Report is intended to provide documentation of tests conducted on a tank system in response to a release or suspected release for the purpose of determining whether a leak exists in the tank(s) and/or any portion of the tank system.
- **Contents to include, but not necessarily be limited to, the following (unless previously submitted)**:
  - Identification of site (location, site name, owner, contact information, ST and/or R numbers (if applicable),
  - Identification and description of tank systems and their status (i.e., closed, inactive, active),
  - A chronology of events leading up to the system test,
  - The rationale for conducting the specific type of test used,
  - A description of how the test was conducted,
  - An explanation of the system test results and, as appropriate, an analysis of the results,
  - A discussion of the need for subsequent testing and/or other actions,

- Identification of planned actions and a schedule for conducting such actions,
- As appropriate, documentation of repairs made to the tank system based on the results of the system test, and
- Maps, figures, tables, etc. shall be included as warranted.

12.3 SITE CHARACTERIZATION

12.3.1 Work plans for Site Characterization & Monitoring

- **Schedule**: as requested by the entity conducting the work and approved by MDNR or at the request of MDNR; if requested by MDNR, a work plan must typically be submitted within 30 days of the request
- **Intent of work plan**: Work plans for site characterization shall explain in detail how full site characterization will occur. Work plans for monitoring shall explain why and how monitoring will be conducted.
- **Contents to include, but not necessarily be limited to, the following (unless previously submitted)**:
  - Site Characterization Work Plan
    - Identification of site (location, site name, owner, contact information, ST and/or R numbers (if applicable),
    - Identification and description of tank systems and their status (i.e., closed, inactive, active),
    - Brief history of the site and any previous investigations,
    - A brief explanation of the scope and intended purpose of the proposed work,
    - A description of the work planned, including field and laboratory methods and procedures to be utilized,
    - Site map showing general location of the site,
    - Site map showing specific site features (e.g., release points; tanks; dispensers; piping; utilities; existing and proposed borings, piezometers, monitoring wells, etc.),
    - Quality assurance/quality control provisions,
    - A schedule for implementation of the work plan and submittal of the investigation report, and
    - Tables, figures, and other maps as warranted shall be included.
  - Monitoring Work Plan
    - Identification of site (location, site name, owner, contact information, ST and/or R numbers (if applicable),
    - Brief history of site including releases and previous investigations and monitoring events,
    - Identification and description of tank systems and their status (i.e., closed, inactive, active),
    - A brief explanation of the scope and intended purpose of the monitoring,
    - Identification of monitoring points and rationale for their use,

- A description of the work planned, including field and laboratory methods and procedures to be utilized,
- Site map showing general location of the site,
- Site map showing specific site features (e.g., release points; tanks; dispensers; piping; utilities; existing and proposed borings, piezometers, monitoring wells, etc.; ensure borings and monitoring wells are identified on each map),
- Quality assurance/quality control provisions,
- Tables, figures, and other maps shall be included as warranted.

12.3.2 Periodic Monitoring Reports

Characterization of a site with groundwater contamination frequently entails monitoring contaminant concentrations in groundwater on a regular basis (e.g., monthly, quarterly, etc.) over an extended period of time. Such monitoring is necessary to characterize the physical extent of the groundwater plume, identify potentially affected receptors, and evaluate the plume's stability. For sites where groundwater monitoring is occurring on a regular basis over an extended period of time, groundwater monitoring reports must be submitted subsequent to each monitoring event. Under the MRBCA process, MDNR requires that groundwater monitoring reports include, at a minimum, the information specified below.

Periodic Monitoring Reports

- **Schedule**: As proposed by the entity conducting monitoring and approved by MDNR or as stipulated by MDNR
- **Intent of report**: To provide recent monitoring data and, overall, to allow for the tracking of contaminant concentrations at a site.
- **Contents to include, but not necessarily be limited to, the following (unless previously submitted)**:
  - A brief history of the site,
  - An explanation of the reason for, and scope and intended purpose of, monitoring,
  - Identification of the monitoring points used and the rationale for their selection,
  - A site map showing the locations of the monitoring points (ensure each is appropriately identified),
  - A description of monitoring conducted, including field and laboratory methods and procedures utilized,
  - If not previously submitted, or if monitoring wells have been added subsequent to the previous groundwater monitoring report, monitoring well installation diagrams (as per the examples at Figures 5-4(a) and (b) of Section 5.0 of this document) and boring logs (as per the examples at Figures 5-3(a) and (b) of Section 5.0),
  - A site map visually depicting the direction of groundwater flow,

- As appropriate, maps showing isoconcentration lines for benzene, total petroleum hydrocarbon-gasoline range organic (TPH-GRO) or diesel range organic (DRO), methyl tert-butyl ether (MTBE), and any other chemicals of concern (COCs) detected at high concentrations and/or over a broad area,
- As appropriate, graphs showing COC concentrations in groundwater at each well over time,
- Laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
- A discussion of the monitoring results and monitoring end point,
- Recommendations or plans for future monitoring,
- A schedule for future monitoring, and
- Tables, figures, and other maps shall be included as warranted.

12.3.3 Site Characterization Report

- **Schedule**: As per the schedule in the work plan or as stipulated by MDNR
- **Intent of report**: Site Characterization Reports shall describe and present the results of actions taken to define the full extent of a release and document current and future land use.
- **Contents to include, but not necessarily be limited to, the following (unless previously submitted)**:
  - An explanation of the reason for, and the scope and purpose of, the Site Characterization,
  - A map showing general site location and specific sampling locations,
  - Brief discussion of the rationale for sample locations chosen,
  - An explanation of the field and laboratory methods and procedures utilized,
  - Monitoring well construction diagrams as per the examples at 5-4(a) and (b) of Section 5.0 of this document,
  - Boring logs for all borings (a log must be submitted regardless of whether the boring was converted to a monitoring well) as per the examples at 5-3(a) and (b) of Section 5.0,
  - As appropriate, maps showing isoconcentration lines for benzene, TPH-GRO or DRO, MTBE, and any other COCs detected at high concentrations and/or over a broad area,
  - Laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - An explanation of any deviations from the approved work plan,
  - An analysis of the findings of the investigation,
  - A discussion of response or remedial actions taken, if applicable,
  - A discussion of the need for subsequent action (investigative, monitoring, remedial, etc.) and identification of planned action,
  - A schedule for future actions, and
  - Figures, tables, other maps, etc. shall be included as warranted.

Soil Vapor Measurement Work Plan

- **Schedule**: As requested by the entity conducting monitoring and approved by MDNR or as stipulated by MDNR
- **Intent of work plan**: To present information pertaining to the purpose and methods of soil vapor sampling. A work plan is not required if soil gas sampling is in accordance with the *Soil Gas Sampling Protocol* found in Appendix C of this guidance.
- **Contents to include, but not necessarily be limited to, the following**:
  - Background information describing why soil vapor monitoring is being proposed, focusing on potentially affected structures,
  - An explanation of how the monitoring will be conducted, including an accounting of both field and laboratory methods and procedures,
  - An explanation of where the monitoring will be conducted, including justification for the proposed soil vapor monitoring points,
  - A map of the site specifically showing the soil vapor monitoring points and all relevant site features (i.e., potentially affected structures),
  - Schematics or other drawings showing the construction of the soil vapor monitoring points and associated sampling equipment,
  - A proposed schedule for monitoring; if more than one monitoring event is being proposed, specify schedule for all events, and
  - Relevant site maps.

12.3.4 Soil Vapor Monitoring Report

- **Schedule:** As proposed in the work plan and agreed to by MDNR or as stipulated by MDNR
- **Intent of report**: The Soil Vapor Monitoring Report shall fully document soil vapor monitoring activities and results.
- **Contents of report to include, but not necessarily be limited to, the following**:
  - A brief site description and history (focusing on potentially affected structures),
  - The purpose and scope of monitoring,
  - The location of monitoring,
  - Site maps showing monitoring points and all relevant site features,
  - If not submitted with work plan, schematics or other drawings illustrating the construction of the monitoring points and sampling equipment,
  - An explanation of any deviations from the approved work plan,
  - Field and laboratory methods and procedures utilized,
  - Laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - An explanation of the monitoring results, including, as appropriate, interpretation of the results,
  - Recommendations for future activities (e.g., additional monitoring, other investigation, remedial action, etc.),

- Schedule of future activities, and
- Other information, maps, tables, graphs, etc., as warranted.

12.4 TIERED RISK ASSESSMENT

12.4.1 Tier 1 Risk Assessment Report

- **Schedule**: As stipulated by MDNR
- **Intent of report**: The Tier 1 Risk Assessment Report is to be a stand alone, comprehensive document that presents all of the data necessary to characterize the site and contamination and to evaluate the risks posed by the contamination.

Note: A Tier 1 Risk Assessment Report by itself need not be submitted for a site evaluated under Tier 2. See discussion below at 12.4.2, Tier 2 Risk Assessment Report.

- **Contents to include, but not necessarily be limited to, the following**:
  - A brief site history,
  - Information pertaining to release discovery, hazard abatement, and initial response,
  - An explanation of investigations conducted,
  - An explanation of the distribution of COCs in all affected media,
  - All applicable boring logs and well construction sheets,
  - All applicable laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - A discussion of how geologic and hydrogeologic conditions have affected COC distribution,
  - An exposure model and explanation of how the model was developed (include both on and off-site complete and potentially complete pathways),
  - A discussion of applicable Tier 1 standards corresponding to the exposure model,
  - A discussion of how representative COC concentrations were developed,
  - A discussion of the results of comparing site-specific representative COC concentrations to applicable target levels,
  - Completed ecological exposure checklists,
  - A discussion of ecological exposure concerns and the need, if applicable, for further evaluation of ecological exposure concerns
  - A discussion of actions, if any, needed to move site toward issuance of a No Further Action letter,
  - A schedule for proposed actions,
  - Site maps showing the site, site features, area(s) and extent of contamination, sampling and monitoring points, surrounding land use, COC isoconcentration lines, and other information as warranted, and
  - Other maps, figures, tables, graphs, diagrams, etc. as warranted.

12.4.2 Tier 2 Risk Assessment Report

A Tier 2 Risk Assessment Report includes all information collected for the Tier 1 risk assessment (and that would be submitted in a Tier 1 Risk Assessment Report if evaluations stopped at Tier 1), plus the additional data from Tier 2 risk assessments. Generally, if a site is evaluated under Tier 2, only one report, the Tier 2 Risk Assessment Report, will be submitted to cover both the Tier 1 and Tier 2 risk assessments.

Tier 2 Risk Assessment Report

- **Schedule**: As stipulated by MDNR
- **Intent of report**: The Tier 2 Risk Assessment Report is to be a stand-alone, comprehensive document that presents all of the data necessary to characterize the site and contamination and to evaluate the risks posed by the contamination in consideration of site-specific conditions. The report shall present the findings of both the Tier 1 and Tier 2 risk assessments but shall do so as to differentiate between the findings.
- **Content of report to include, but not necessarily be limited to**:
  - Identification of Tier 2 activities,
  - An explanation of the purpose and scope of Tier 2 activities,
  - An explanation of the field and laboratory methods and procedures utilized at Tier 2,
  - All boring logs and well construction sheets (if not previously submitted),
  - All applicable laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - If revised or not previously submitted, an exposure model and explanation of how the model was developed (include both on and off-site complete and potentially complete pathways),
  - Discussion of applicable Tier 2 standards corresponding to exposure model,
  - A discussion of how the Tier 2 standards were developed (e.g., fate and transport parameters and their selection, rationale for selections, etc.),
  - A discussion of how representative COC concentrations were developed,
  - A discussion of the results of comparing site-specific COC concentrations to applicable Tier 2 target levels,
  - Completed ecological exposure checklists,
  - A discussion of ecological exposure concerns and the need, if applicable, for further evaluation of ecological exposure concerns,
  - A discussion of actions, if any, needed to move site toward issuance of a No Further Action letter,
  - A schedule for proposed actions,
  - Site maps showing the site, site features, area(s) and extent of contamination, sampling and monitoring points, surrounding land use, COC isoconcentration lines, and other information as warranted, and
  - Other maps, figures, tables, graphs, diagrams, etc. as warranted.

12.4.3 Tier 3 Work Plan

The content of a Tier 3 Work Plan is beyond the scope of this guidance document, though some guidance regarding the content is provided below.

Tier 3 Work Plan

- **Schedule**: As stipulated by MDNR
- **Intent of work plan**: The intent of a Tier 3 work plan is to clearly explain what specific activities are to be conducted at Tier 3, the purpose of such activities, how they will be conducted, and their intended scope. All alternative methods and models used at Tier 3 must be clearly identified and their use fully explained.
- **Contents of work plan to include, but not necessarily be limited to, the following:**
  - A brief discussion of the results of Tier 1 and 2 risk assessments,
  - Proposed activities to be conducted at Tier 3,
  - An explanation of the purpose, scope, and intent of the Tier 3 activities,
  - A detailed explanation of methods and models to be used at Tier 3,
  - A schedule for conducting the proposed Tier 3 activities, and
  - Site maps necessary to identify and characterize site and areas to which Tier 3 activities will apply.

12.4.4 Tier 3 Risk Assessment Report

- **Schedule**: As per the schedule in the approved work plan or as stipulated by MDNR
- **Intent of report**: The Tier 3 Risk Assessment Report must fully and clearly explain the purpose, scope, and intent of activities conducted at Tier 3 and present the results of such activities.
- **Contents to include, but not necessarily be limited to, the following**:
  -
  - An explanation of the Tier 3 activities, their purpose, scope, and intent,
  - The field, office, and laboratory methods and procedures used,
  - Identification and application of the methods and models used at Tier 3 to develop site-specific target levels,
  - A discussion of the exposure model and, in particular, any modifications made to the exposure model between Tiers 1, 2, and 3,
  - A presentation and discussion of the Tier 3 target levels that were developed,
  - All applicable laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - An explanation of additional data (COC data, geotechnical data, exposure factors, physical and chemical properties of COCs, toxicity data, etc.) gathered and used at Tier 3,

- A discussion of the comparison of site-specific representative COC concentrations to Tier 3 site-specific target levels (SSTLs),
- An explanation of the actions warranted, if any, due to the comparison of site-specific representative COC concentrations to Tier 3 SSTLs,
- A schedule for conducting additional activities,
- Site maps showing the site, site features, area(s) and extent of contamination, sampling and monitoring points, surrounding land use, COC isoconcentration lines, and other information as warranted, and
- Other maps, figures, tables, graphs, diagrams, etc. as warranted.

12.5 CORRECTIVE ACTION PLAN (CAP)

12.5.1 **Corrective Action Plan** (narrative)

- **Schedule**: As stipulated by MDNR
- **Intent of plan**: The CAP is intended to explain methods to be used to address excess risks posed by contaminants at a site. The CAP may include one or more of the following: corrective action, activity and use limitations (AULs), monitoring (performance, verification, stability, etc.), etc.
- **Contents to include, but not necessarily be limited to, the following**:
  - A discussion of the results of the tier analysis,
  - Identification of the reason why corrective action is needed,
  - An explanation of the purpose, scope, and intent of corrective action activities,
  - A description of the corrective action activities to be used and how they will be applied,
  - An explanation of the field and laboratory methods and procedures to be used,
  - An explanation of monitoring necessary during implementation of the CAP (such activities might require an additional work plan, see below),
  - An explanation of the activities necessary to demonstrate CAP efficacy,
  - A schedule for implementation of the CAP,
  - An explanation of the anticipated duration of corrective action activities,
  - A discussion of the potential need for activities beyond those outlined in the work plan,
  - An explanation of how and why implementation of the CAP will result in MDNR's issuance of a No Further Action letter,
  - Site maps identifying the site, the area(s) of contamination, all relevant sampling and monitoring points, surrounding land use, and the proposed location and extent of corrective action activities, and
  - Other information as warranted.

12.5.2 Interim Corrective Action Work Plan (narrative)

- **Schedule:** As stipulated by MDNR
- **Intent of Work Plan:** The Interim Corrective Action Work Plan is a component of the CAP and shall propose specific corrective actions to address excessive risk posed by contamination at a site. An Interim Corrective Action Work Plan must be submitted when corrective actions will be conducted as part of the overall CAP.
- **Contents to include, but not necessarily be limited to, the following:**
  - A brief history of the site, including a chronology of events,
  - An explanation of the corrective actions proposed, how they will be implemented, and what particular risks they are intended to address,
  - A discussion of the time needed to complete the corrective actions, including a schedule covering implementation through completion,
  - An explanation regarding how the interim corrective actions relate to the final remedy for the site,
  - If applicable, a description of monitoring necessary to evaluate the effects of the interim actions,
  - A site map showing the specific areas of the site to which the interim actions will apply, and
  - Other information, maps, tables, graphs, etc. as warranted.

12.5.3 Free Product Removal Work Plan

At sites where free product is discovered such that, in accordance with 10 CSR 26-2.075, free product removal is warranted, the report submitted within 45 days of the discovery of the free product must include all of the information required by 10 CSR 26-2.075. If free product removal activities are to be conducted on an ongoing basis, a free product removal report must be submitted to MDNR every 30 days unless a different reporting schedule is approved by MDNR. Free product removal activities that are conducted to address risks identified in the tiered risk assessments (as opposed to those conducted as part of initial hazard abatement activities) fall under the CAP. Refer to the following for guidance on the content of free product removal work plan and reports.

Free Product Removal Work Plan (narrative)

- **Schedule**: As stipulated by MDNR
- **Intent of work plan**: The Free Product Removal Work Plan is a component of the CAP and should propose one or more methods to remove free product from the environment to the extent warranted to adequately address excess risks associated with the free product.
- **Contents to include, but not necessarily be limited to, the following**:
  - A brief history of the site and the occurrence of free product on the site,
  - An explanation of the methods to be used to remove free product from the environment and to manage free product once removed,
  - As necessary, schematics or diagrams showing the proposed free product

recovery method or system,
- An explanation of the intended scope and duration of the removal activities,
- A proposal for monitoring to track free product occurrence and distribution at the site,
- A discussion of the proposed endpoint for removal activities,
- A site map identifying the extent of free product and identifying all free product removal points,
- A schedule for free product removal activities, and
- Other information, tables, graphs, maps, etc. as warranted.

12.5.4 Activity and Use Limitation Work Plan

For the purposes of the MRBCA process, AULs are differentiated from corrective actions to indicate that AULs are risk management mechanisms that have no direct effect on COCs found at a site. Rather, AULs are mechanisms that prevent completion of an exposure pathway or reduce the likelihood that a pathway will become complete by providing information regarding the concentrations and distribution of COCs to users of the site and/or by restricting certain uses or activities that may occur at a site. Refer to Section 6.9 and Section 11 of this guidance for further information regarding AULs.

When AULs are intended to serve as a means of addressing excess risks posed by contaminants at a site, an AUL Work Plan must first be submitted to, and approved by, MDNR, as discussed below.

Activity and Use Limitation Work Plan
- **Schedule**: As stipulated by MDNR
- **Intent of work plan**: The AUL Work Plan is a component of the CAP and is intended to describe how AULs will be used to address excess risks posed by contaminants at a site.
- **Contents to include, but not necessarily be limited to, the following**:
  - A brief history of the site, focusing on those aspects to which AULs will apply,
  - An explanation of the specific type or types of AULs being proposed to address excess risk,
  - Justification for the use of the AUL(s),
  - If AULs are one of two or more one risk management methods being proposed for a site, explain what other methods are proposed and refer to the applicable work plan in which such methods are discussed,
  - An explanation of how the AULs will be implemented and maintained; for a physical AUL, this includes plans showing the design and intended construction of the AUL,
  - A schedule for implementation of the AULs,
  - If a legal AUL is proposed (e.g., Deed Notice, Restrictive Covenant, etc.), a general copy of the proposed legal AUL shall be included,

- A site map clearly depicting that portion of the site to which the AUL(s) will apply, and
- Other information, maps, tables, graphs, etc. as warranted.

12.5.5 CAP Performance Monitoring Plan

- **Schedule**: As stipulated by MDNR
- **Intent of report**: A CAP Performance Monitoring Plan is a component of the CAP and describes the monitoring activities necessary to determine the effectiveness and completeness of corrective action activities.
- **Contents to include, but not necessarily be limited to, the following**:
  - A site description, including a discussion of known contamination,
  - An explanation of the corrective action activities to be conducted and why performance monitoring is needed,
  - A description of the type of performance monitoring to be conducted,
  - An explanation of the field and laboratory methods and procedures to be used as part of monitoring activities,
  - An explanation of the defined end point of monitoring,
  - If applicable, an explanation of the defined monitoring point at which alternate actions are warranted,
  - A schedule explaining the frequency and duration of proposed monitoring activities,
  - Site maps identifying the location of monitoring points, areas of contamination, relevant site features, and surrounding land use, and
  - Other information, maps, figures, tables, etc. as warranted.

12.6 CAP COMPLETION AND PERFORMANCE MONITORING REPORT

- **Schedule**: As proposed in the work plan and agreed to by MDNR or as stipulated by MDNR
- **Intent of report**: A CAP Completion and Performance Monitoring Report presents information to document the successful completion of all elements of the CAP and all monitoring data collected at a site to determine the effectiveness and completeness of corrective action activities.
- **Contents to include, but not necessarily be limited to, the following**:
  - A description of all corrective action activities conducted, the purpose of each, and the results of implementation of each
  - A description of the monitoring activities conducted, to include their purpose and scope,
  - If different from the work plan, a description of the field and laboratory methods and procedures used during monitoring,
  - Interpretation of the monitoring data, including an assessment of whether monitoring is complete or indicates that additional actions (investigative, remedial, or monitoring) are needed,
  - If an AUL is proposed or warranted, documentation that the AUL is in place or has otherwise been appropriately implemented must be included

in the report
  - Recommendations for further actions,
  - A schedule for future actions,
  - All applicable laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - Site maps needed to illustrate monitoring results,
  - Other information, maps, figures, tables, etc. as warranted, and
  - A request for issuance of a NFA letter, as appropriate.

12.6.1 Interim Corrective Action Report

- **Schedule**: As stipulated by MDNR
- **Intent of report**: An Interim Corrective Action Report is a component of the CAP Completion and Performance Monitoring Report and is intended to document interim corrective actions and provide information regarding the results of the actions taken.
- **Contents to include, but not necessarily be limited to, the following**:
  - Identification of the site,
  - Release characterization,
  - An explanation of the interim corrective actions conducted,
  - An explanation of when the actions were conducted and their purpose, scope, and intent,
  - A description of the methods and procedures used to conduct the interim actions,
  - A presentation and discussion of data collected to determine the efficacy of the interim actions,
  - All applicable laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - A discussion of the effect of interim actions on the site as a whole,
  - Identification of post-interim corrective action activities required,
  - Maps identifying the site, the area in which interim actions occurred, the extent of interim actions, pre and post-interim action sampling and monitoring points, known extent of contamination in all affected media both before and after interim actions, land use surrounding the site, and
  - Other maps, figures, tables, graphs, diagrams, etc. as warranted.

12.6.2 Free Product Removal Report

- **Schedule**: First report within 45 days of confirmed release, subsequent reports as proposed in the work plan and agreed or as stipulated by MDNR.
- **Intent of report**: A Free Product Removal Report can both be a component of the CAP Completion and Performance Monitoring Report and stand alone as part of release response reporting. Either way, the report is intended to document the free product removal activities conducted at a site to address excess risks associated with the free product, as identified in the tiered risk assessments.

- **Contents to include, but not necessarily be limited to, the following**:
  - Site history, including release discovery and initial abatement activities (including initial free product removal activities),
  - A discussion of free product location and extent, including maps illustrating location and extent and identifying existing and historical monitoring points,
  - A discussion of the composition of the free product (e.g., gasoline, diesel, etc.),
  - All applicable laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - A discussion of removal activities conducted and the practicability of further removal given consideration of all available removal methods,
  - A table listing each free product removal event, the method of removal used, the volume of free product removed during each event, and the total volume of free product removed (the volume of free product removed should be differentiated from the total volume of fluid removed),
  - Text describing the expected duration of free product recovery activities and whether any changes have or will occur in the method or frequency of free product recovery or monitoring,
  - A discussion of planned future removal activities and a corresponding schedule, and
  - Other maps, figures, tables, graphs, diagrams, etc. as warranted.

12.6.3 Activity and Use Limitations Report

- **Schedule**: As stipulated by MDNR
- **Intent of report**: This report is a component of the CAP Completion and Performance Monitoring Report and documents that proposed AULs are in place.
- **Contents to include, but not necessarily be limited to, the following**:
  - A site description, focusing on that portion of the site to which the AUL(s) applies,
  - An explanation of the risk(s) to be managed via an AUL(s),
  - Identification of the AUL(s) used, its purpose, and how each AUL applies to the site,
  - For legal AULs, documentation that the AUL has been appropriately recorded in the property chain of title (i.e., property deed); for pre-existing AULs, the effective or established date of the AUL must be provided); a copy of the AUL, as recorded and documented as recorded, must be included in the report,
  - For physical AULs, documentation of the AUL's existence or construction and its effective placement or location relative to the exposure pathway(s) to which it applies (Note: this information shall also be conveyed via a site map on which the location of the contaminants and the AUL(s) are shown),
  - If an AUL(s) is one of two or more methods used or to be used to address excess risk at a site, the report must include a discussion of the other

method(s) to be used and refer to the applicable work plan or report, and
- Maps, tables, figures, and other information, as warranted.

12.6.4 Corrective Action Report

- **Schedule**: As stipulated in the work plan and agreed to by MDNR or as stipulated by MDNR
- **Intent of report**: The Corrective Action Report is a component of the CAP Completion and Performance Monitoring Report that provides documentation of corrective actions conducted at a site to address specific risks identified in the risk assessment report.
- **Contents to include, but not necessarily be limited to, the following:**
  - A description of why corrective actions were warranted and each corrective action chosen,
  - A description of the purpose and scope of corrective actions,
  - A discussion of the methods and procedures used in implementing the corrective actions,
  - Efficacy monitoring or verification sampling results,
  - All applicable laboratory analytical data sheets, QA/QC data, and chain of custody forms (must be submitted as received from the laboratory),
  - A discussion of the effect of corrective actions,
  - Identification of post-corrective action activities required (e.g., monitoring, further corrective action, etc.),
  - A schedule for conducting follow up activities,
  - Maps identifying the site, the area in which corrective actions occurred, the extent of corrective actions, pre and post-corrective action sampling and monitoring points, known extent of contamination in all affected media both before and after corrective action, land use surrounding the site, and
  - Other information, maps, figures, tables, etc. as warranted.